592
342 magazines and pasted on the wall, and here he entertains visitors who come for conversation or study.

3

Types of Houses

342 In all the villages studied, the houses may be divided into three general categories: (1) the Japanese style house with the thatch or tile roof, (2) the smaller stone house with the Japanese type floor plan, and (3) various shacks resembling in some details the simple structure of the old Okinawan rural house.

[313] The sturdy Japanese type house is made of excellent hardwoods im-
439 ported from Japan or brought from the forests of northern Okinawa. This house was often constructed without nails. It was put together
● [335] by mortise and tenon joints, and also with a piece of wood, square on the edge and about three inches long which functions like a dowel. This is known as a kusabi. In modern houses, both of the simple and more complex types, nails are more commonly used.

[355] The eaves of this house are supported by strong poles, unfinished, usually from the Japanese redwood (sugi in Japanese, Cryptomeria
[411] japonica, D. Don) or the ihumaki (Podocarpus macrophyllus D. Don). The poles are placed on flat triangular stones for foundation support. The houses have plank floors. Both the tile and the thatch roof types (to be
[352] described later) have the same floor plan with the size of the rooms determined by the number of mats (tatami in Japanese) desired.

The half tile, half thatch roof is not uncommon, an indication either of a roof partially destroyed by the war which has been repaired by thatch, or a thatched roof gradually being replaced by tile. This is a slow process, as tile is costly. Basically, all of these houses have the same general plan, except for differences in roof materials.

[355] The older Japanese type houses with a tile roof and the newer ones being built on that model are provided with a drain pipe for rain water
[415] catchment. This pipe, running along the length and the width of the roof channels the water into a large tank on the ground, reducing the
[312] labor involved in carrying water from village ponds or central springs. Many of these rain water catchments disappeared when the old houses were destroyed in the war. Drain pipes cannot be attached to the thatch. In general, rain water is not now a plentiful source of supply in the villages, though buckets and tubs are frequently put out during a heavy downpour, and this water is used for drinking and cooking until it begins to spoil. It may supplement the water carried from a central village faucet, the well, or a pond.

The construction of the Japanese type house is complex. Basically, the design of the house is derived from the arrangement of three rooms,

BUILDING A SIMPLE HOUSE

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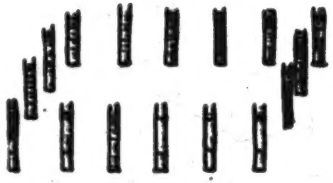

Fig. 1

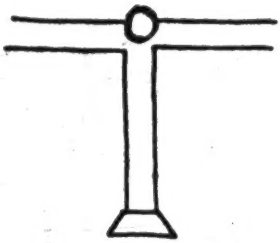

Fig. 2

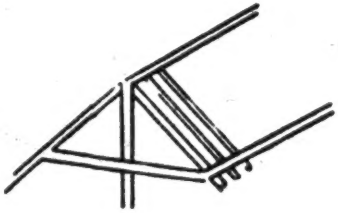

Fig. 3

Fig. 4

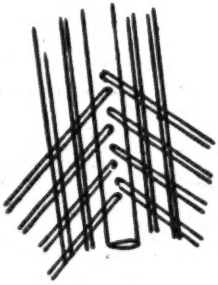

Fig. 5

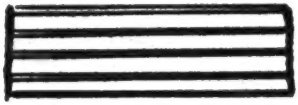

Fig. 6

the thatch is old and the pine siding obviously has replaced the diagonal wattle, but in other essentials it is a simple peasant hut built in rural Okinawa for generations. 342

(1) The upright supporting poles for the frame of the rectangular house are set on flat stones. In Hinatogawa, where they are quarried, they are especially cut for this purpose. The uprights are set about six feet long, and 3 1/2 inches in diameter. The poles are set so that there are four on the sides, six in front and rear, the end poles serving a dual purpose. (Fig. 1) 342 335

(2) On the front and back, cross poles, or tie beams to support the roof are nailed on to the cut end of the upright. The poles on the sides are fastened by making a simple groove the diameter of the pole. (Fig. 2)

(3) With the frame completed, the box like structure is ready for the ridge pole and its supports. These uprights are longer, perhaps 9 or 10 feet, and provide the slant of the simple gabled roof. They are also set on stones, but inside the area inclosed by the upright supporting poles. The ridgepole is now nailed to the ends of the center posts.

(4) The problem now is to provide a frame on the slanting roof for rods of miscanthus which in turn support the thatch. For this purpose, smaller poles, like rafters, run from the peak of the roof to project over the eaves. (Fig. 3)

(5) These rafter poles, set about one foot apart, jut out over the eaves on the front and back of the house about 1 1/2 feet. The ends of these small rafter poles are joined together with a longer horizontal pole. This horizontal pole is nailed on top of the ends. (Fig. 4) These poles may not be long enough for a whole side. They are rough, often crooked. If they are not long enough, the ends of two poles may be lashed together with rope.

(6) These rafter poles are not fitted or grooved into the ridge pole. Neither are the ends mitred. Instead the poles' ends alternate with one another. (Fig. 5)

(7) Horizontal poles are then laid across the rafter poles and nailed down. These brace the structure and divide the roof into a series of rectangles.

(8) The frame of the house is now completed and it is ready for the roofing and the siding. To help in nailing the rafter poles, women prepare a braid of rice straw or miscanthus and nails are inserted into the loops of the braids. The braid is handed up to the workman who puts it between his teeth, providing a continuing source of nails, as he tacks down the poles of the roof. Old men and old women prepare the nail braid. [283] [887]

342 (9) While the stones are being set and the uprights are being
[462] put on them, the women of the house and their female friends and
476] relatives have brought in miscanthus grass and have begun making
824] sheaves, tying each sheaf with a piece of grass. This goes on while the rafter poles are being nailed down. It is over this that the thatch is placed. The grass may be green or dry. In December it is in blossom, and when it is used, it gives the roof a snowy, fluffy appearance.

342 (10) A series of short rods of dwarf bamboo or dried miscanthus
335 stalks is then prepared to fit over the checkerboard made by the interacting poles of the roof. The ends of these, which are about 7 feet long and 1/2 inch in diameter, are inserted into the braid of two lengths of rope about 5 feet long. These rods are placed at about 3 inch intervals. These frames are laid end down slope. They
[284] are lashed to the poles and to other bracing material beneath. All
[462] this is the work of men. While some of them are on the roof, others have begun nailing the siding. (See Fig. 6 for a sketch of the frames).

This is a very cheap lumber about 6 feet x 1 inch x 3/8 inch. The sides are boarded up like shingles except that the boards have uniform thickness. Each board overlaps the next lower one by 1/2 inch, a space of about 3 inches is left from the top of the upright poles to which the siding is nailed. The siding is sufficiently thin so that one side need not be thicker than the other.

(11) The triangular odd corners formed by the cross beams, the rafters and the center post are filled by fitted pieces instead of the rows of parallel rods used for the larger and more regular areas.

342 (12) The roof is now ready for sewing the thatch on. First,
284 the women throw several sheaves of miscanthus on the roof. They are tossed by hand or pitched by a rude pitchfork made by lashing a short branch to a long pole to form a Y. This is the kishi. (Fig. 7).
[413] One workman goes inside the dwelling. He has a pole about 6 feet long (a hari, the Japanese word for needle) pointed at the end with a hole near the point. (Fig. 8). Starting from the eaves and working up, the man on the roof unties the sheaves and spreads a layer of grass along the length of the roof. This layer is held in place by a horizontal pole placed over it. The man inside has threaded the needle with stout twine; he pushes the long needle with the twine up through the network of the roof. This is taken by the workman on the roof who feeds the needle with its twine back again. This sewing continues until the three layers, the checkerboard, the parallel rods which have been lashed to it, and the grass with the poles to hold it down have been finally sewed together. As each strip is completed the workmen move up the slope a little. The grass is about 3 1/2 feet long and about one foot is allowed loose on the end to overlap the layer below. That portion of the grass which is not free is tied and sewed very securely. There is much tugging, pulling, and grunting to make the knot as tight as possible.

000 (13) As the top is reached, another operation is necessary to cap

(13) As the top is reached, another operation is necessary to cap the peak of the roof. The two layers of grass require, when they meet, something to cap over them. This is done by laying down over the peak a rectangular frame of poles to form the base for the cap. The grass is then heaped up on this bed. It is held down by long rods of dwarf bamboo or miscanthus, forming a rough arch and running lengthwise. These rods with the grass underneath are sewn on to the ridge pole and the surrounding network of poles underneath with heavy twine or rope. Often also sharp sticks are placed cross ways. These are known as kansashi and derive their name from the pin used by Japanese women to fasten up their hair when they wear the traditional headdress. These sticks in fact perform this function; perhaps even better, they can be compared to the long hat pin. A thatched roof so constructed will last a long time, often 5 or 10 years, though it may be changed more often if damaged. Very often if the house has a thatch roof and the sides are made of a weak material, the house, including the roof is bound around with a heavy thick wire, cable or rope to protect it from typhoons. (Fig. 9 for a sketch of the roof). 342 335

The interior of the simple house which we have been describing is finished off in a simple manner with flooring and siding, also of cheap quality.

It may be added, parenthetically, that there are two different methods of laying the tile roof. In the hipped type, the tile slants from the roof to the eaves. The variant is the hipped type with a small gable. Occasionally, on the tile roof, an ornamental lion shaped terra cotta figure is placed for decorative purposes. 342 [532]

Tile is set over a foundation of long rods of small bamboo, dwarf bamboo or mature large size miscanthus. Rice straw is used to tie these rods together and to the frame. Mud, usually found in the yard and often containing considerable clay, is placed over this rod base and the tile is set so that the crests of the two pieces of tile which meet on the bottom are cupped by a tile on top. (Fig. 10).

5

Tools

Carpenters' tools are Japanese imports, although local blacksmiths make tools based on the Japanese design or repair them. The common tools are: 413 [439] [326]

(1) The plane (kanna in Japanese). The plane iron is set in a rectangular block of wood. In working wood, the plane is drawn toward the operator.

(2) A smaller plane

1: Glacken E-5 (1951-1952) 1953 AC7 Okinawa AC7

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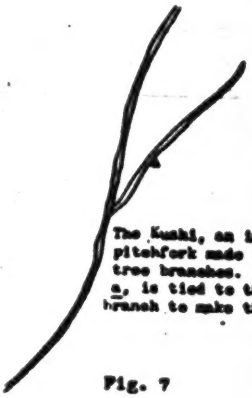
[413]



The kushi, an improvised pitchfork made out of tree branches. The piece, a, is tied to the main branch to make the fork.

Fig. 7

The kari

Fig. 8

[335]

CAPPING THE ROOF

Fig. 9

TILE SETTING

Fig. 10

floor, resting his feet outside on the ground. An overhanging roof protects him from the rain. Larger houses have an entrance hall and a porch running along the front. Since these porches also have sliding door panels, few people bother to use the entrance except on formal visits.

The simple structures have a framework which is basically the same as that of the more complex ones. Neither is constructed with nails but held together by mortise and tenon joints. Thick layers of thatch or a tile roof give adequate protection from rains. Thatch roofs need replacement every few years, but they keep the house cooler than the more permanent, more expensive clay or cement tile roofs. House walls are made of very thin, cheap wood which weathers fast and cracks, allowing winds to enter freely. Only the new houses have solid double walls. The floor in the simple buildings consists of planks which in many houses are not nailed down; during the winter months the cold penetrates through the wide slots between the boards. Better houses have ceilings and doors to separate the "first" and "second" room in the front of the house, as well as solid floors.

Smoke from the open fireplace in the kitchen rises into the roof and seeps through the thatch. Poor eyesight, common among children, is believed by the villagers to result from smoke-filled houses and poor lighting. In the evening, dim light is provided by one or two kerosene lamps.

The ancestral shrine, a built-in shelf for the ancestral tablets, has its place in the "second" room. This shrine is only found in the homes of oldest sons. It is not treated with special reverence. Photographs of the deceased as well as of living relatives are kept there as well as personal belongings—a letter, money, a bottle of sake, or gifts. During religious holidays of ancestral worship, red hibiscus flowers, the color for the dead, are placed on the shelf. Since the shelf is high from the floor, small children cannot get at it.

The only furniture in all houses is a low table on which food and drinks are served. Everybody sits on the floor, legs crossed and feet tucked under their thighs in the case of men or put behind to one side in the case of women. Very few houses in Taira have the thick, padded straw mats found in the homes of more well-to-do people in Okinawa. But every family has several thin mats of woven reed standing in one corner of the room; these are spread out for guests to sit on or for a member of the household who lies down during the day. Storage shelves are used in simple houses, but in the better houses mattresses, comforters, and hard pillows are kept in a built-in closet space during the day. On sunny days women air the bedding by spreading it over walls, fences, or in the grass.